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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,549	06/30/2000	Gurumukh S. Tiwana	CISCP151	2362

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EXAMINER

DUONG, THOMAS

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 09/16/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/608,549

Applicant(s)

TIWANA ET AL.

Examiner

Thomas Duong

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

*Claims 1-3 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin et al. (U.S. Patent No. 6,405,256 B1).*

3. With regard to *claims 1 and 25*, Lin reference discloses,

- *when a new cache system starts up in a cache cluster having a plurality of total buckets, determining a full bucket allocation for the new cache system (column 2, lines 30-39).*
- *assigning buckets to the new cache system using a first technique when the cache cluster is not operating at a maximum load (column 2-3, lines 65-2).*
- *assigning buckets to the new cache system using a second technique that differs from the first technique, wherein the second technique is performed after the first technique (column 3, lines 8-28).*

4. With regard to *claim 2*, Lin reference discloses,

- *assigning the full bucket allocation to the new cache system when the cache cluster is operating at a maximum load (column 3, lines 8-28).*

5. With regard to *claim 3*, Lin reference discloses,
- *assigning buckets to the new cache system based on a first technique when the cache cluster is not operating at a maximum load (column 2-3, lines 65-2).*

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

*Claims 4-24* are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (U.S. Patent No. 6,405,256 B1) and further in view of Cisco Systems, Inc. (Release Notes for Cisco Cache Engine 500 Series, Software Version 2.1.0).

7. With regard to *claims 4-6, 10, 12-14 and 18-24*, Lin reference discloses,
- *periodically monitoring a load of the new cache system (column 8, lines 22-39). However, Lin reference does not explicitly disclose,*
  - *when the new cache system is overloaded, shedding a minimum number of buckets from the new cache system*
  - *when the new cache system is underloaded, adding the minimum number of buckets to the new cache system*

Cisco Systems, Inc. teaches,

- *when the new cache system is overloaded, shedding a minimum number of buckets from the new cache system (page 9).*
- *when the new cache system is underloaded, adding the minimum number of buckets to the new cache system (page 9).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Cisco Systems, Inc. reference with Lin reference to alleviate the network congestion problem that may occur if the user request a large multimedia file or avoid it all together.

8. With regard to *claims 7-9, 11 and 15-17*, Lin reference discloses,

- *initially assigning a portion of the full bucket allocation to the new cache system (column 2, lines 30-39). However, Lin reference does not explicitly disclose,*
- *when the new cache system is overloaded and when no buckets have been previously shed, periodically shedding a portion of the assigned buckets from the new cache system*
- *when the new cache system is overloaded and when buckets have been previously shed, periodically shedding a portion of a number of buckets that were previously shed from the new cache system*
- *when the new cache system is not overloaded and when no buckets have been previously shed, periodically assigning a portion of the unassigned buckets to the new cache system*

- *when the new cache system is not overloaded and when buckets have been previously shed, periodically assigning a portion of a number of buckets that were previously shed from the new cache system*

Cisco Systems, Inc. teaches,

- *when the new cache system is overloaded and when no buckets have been previously shed, periodically shedding a portion of the assigned buckets from the new cache system (page 9).*
- *when the new cache system is overloaded and when buckets have been previously shed, periodically shedding a portion of a number of buckets that were previously shed from the new cache system (page 9).*
- *when the new cache system is not overloaded and when no buckets have been previously shed, periodically assigning a portion of the unassigned buckets to the new cache system (page 9).*
- *when the new cache system is not overloaded and when buckets have been previously shed, periodically assigning a portion of a number of buckets that were previously shed from the new cache system (page 9).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Cisco Systems, Inc. reference with Lin reference to alleviate the network congestion problem that may occur if the user request a large multimedia file or avoid it all together.

### **Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Teoman et al. (U.S Patent No. 6,463,509 B1)
- Teoman et al. (U.S Patent No. 6,370,614 B1)
- Chlan et al. (U.S. Patent No. 6,385,642 B1)
- Lumelsky et al. (U.S. Patent No. 6,463,454 B1)
- Bitner et al. (U.S. Patent No. 5,210,829)
- Hahne et al. (U.S Patent No. 5,014,265)

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Duong whose telephone number is 703/305-1886. The examiner can normally be reached on M-F 7:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 703/308-5221. The fax phone numbers for the organization where this application or proceeding is assigned are 703/305-3719 for regular communications and 703/305-3719 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703/305-3900.




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Art Unit: 2143

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Thomas Duong  
Examiner  
Art Unit 2143

September 5, 2003



DAVID WILEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100